CLIFTON RANGER DISTRICT APACHE/SITGREAVES NATIONAL FOREST ANNUAL OPERATING INSTRUCTIONS (AOI)

Baseline-Horsesprings Anchor Ranch LLC 2019

I. PERMITTED USE:

The following table illustrates the number of livestock and season of use permitted on the Baseline-Horseprings Allotment as per Term Grazing Permit # 03010329 issued to Anchor Ranch LLC (Jim & Clarice Holder) on January 31, 2017.

KIND	CLASS	NUMBERS	AUM	SEASON OF USE
Cattle	Cow/Calf	100	1188	09/01 to 05/31
Cattle	Yearling (9-18 months)	405	2552	09/01 to 05/31
Horse	Horse or Mule	5	60	03/01 to 02/28
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II. AUTHORIZED USE:

The following numbers and classes of livestock are authorized to graze on the Baseline-Horsesprings Allotment this year.

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KIND	CLASS	NUMBERS	AUM	SEASON OF USE (grazing year 03/01 – 02/28)		
Cattle	Cow/Calf	115	1821	03/01/19 - 02/28/2020		
	Yearling	10	84	03/01/19 - 02/28/2020		
	Bull	5	90	03/01/19 - 02/28/2020		
	Total Head:					
Horse/Mule	Mature	3-Headqtrs	25	04/01 – 11/15/2019		

^{**} Per handbook 2209.13 R3 Supplement, 2013 section 16.12: Season of use extended from 8 month to yearlong authorizing AUM's of approximately 1700 AUM's which is 574 AUM's less of the 2274 AUM maximum, therefore based on this as well as same prescribed use levels it is in my professional judgement that this modification is within the scope of the most recent NEPA Analysis. (E. Holloway, Clifton District Ranger)

III. ROTATION SCHEDULE: Livestock use is authorized as follows in the pasture rotation schedule. Deviations from this must be made in advance and amended in the AOI.

Actual dates may vary (+ or - 5 days) dependent on utilization levels, range conditions and time required moving livestock.

PASTURE	NUMBER	SEASON OF USE(calendar)	GRAZING INTENSITY	KEY AREA	KEY SPECIES
South Bear Canyon	130	1/30 – 3/15/19	35-45%	S6	BOGR
Black Mountain (brand coming out)	130	3/16 – 05/15/19	20 – 30%	S8, S4	НІВЕ, ВОНІ
East	130	5/16 – 8/15/19	35-45%	S9	BOGR
Eagle	130	8/16 – 09/15/19	20-30%	S14	HIBE BOGR
North Bear Canyon	130	9/16 – 11/15/19	35-45%	C1, S1, P1	HIBE
South Water Loop	130	11/16 – 12/15	35-45%	S2, S3	BOCU, HIBE
Bear Canyon Trap	130	12/16 -12/24	35-45%		the three or of a second
Clay Canyon	130	12/25 – 12/31/19	35-45%		the transfer of the particle o

FS Admin South		130	 01/01/20 - 1/10/20	35-45%		i
FS Admin North		130	 1/11/20 - 1/20/20	35-45%	 	
Cemetary		130	1/21/20 - 1/27/20	35-45%		1
North Water Loop		130	1/28/20 - 2/28/20	35-45%		
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^{*}FS Manual citation here if need be....

DROUGHT CONTIGENCY (2209.13 11-14 R3 supplement2013 19.1 Drought Guideline)

"The question for land managers is not will drought occur, but are land managers prepared for drought? Land managers and grazing permittees, must plan for drought as a normal part of management and business. The Standardized Precipitation Index (SPI) is a unit of measure that compares recent precipitation values for a period of interest with long term historical values to assess moisture conditions in a given area. In the Southwestern Region, anytime the SPI reaches a value of minus 1.00 or less for the preceeding 12 month period, grazing allotments should be evaluated for existing drought conditions."

The District wants to be proactive and plan for drought like conditions and/or lacking stock water availability when those conditions materialize and incorporate into AOI grazing management and pasture rotation as much as possible.

IV. ALLOWABLE USE STANDARDS (Grazing Intensity)

Allowable use of forage is based on the amount and kind of forage on the allotment, plant needs, range condition, trend, and grazing management strategy. Duration, frequency, and timing may be manipulated within the grazing schedule to meet allowable use standards. Grazing intensity may be described in terms herbage removed during the grazing and/or growing period, or as a utilization level at the end of the growing period. Removal of leaf material, when the plant is actively growing can affect root growth which in turn affects future leaf growth. Sufficient leaf area is essential to support plant functions through photosynthesis.

The allowable use levels for this allotment are established for key areas and key species by pasture for the time period livestock are in a pasture. The use on key species in key areas should be used as a trigger the length of the grazing period in each pasture. The establishment of the utilization standards is consistent with 36 CFR 222 regulations, FSM 2210 and 2230, and FSH 2209.21.

For simplicity, key areas are generally considered as follows: 1) full capacity rangeland located on ridgetops/mesas within a ¼ mile from available water sources; 2) canyon bottoms/riparian areas with free flowing water or springs regardless of distance from water; 3) any area containing full capacity range with erosive soils and insufficient/marginal ground cover to protect the soil; or 4) areas containing habitat, whether occupied, suitable and unoccupied, or potentially suitable habitat, for threatened, endangered, or proposed species that are of concern to the Forest Service.

Key areas should be designated in cooperation with the Forest Service and the permittee.

Grazing Intensity is discussed by Holechek and others (Holechek, Jerry L., Rex D. Pieper, and Carlton H. Herbel. 2004. Range Management, Principles & Practices. Prentice Hall, page 248):

Table 3. Qualitative characteristics of grazing intensity categories used to characterize New Mexico rangelands (Holechek & Galt. 6/00, Rangelands).

Qualitative Grazing Intensity Category	Use of Forage by Weight	Qualitative Indicators of Grazing Intensity
Light to non-use	0-30	Only choice plants (key species) and areas show use. There is no use of poor forage plants

Conservative	31-40	Choice forage plants (key species) have abundant seed stalks; Areas more than a mile from water show little use: About one third to one half primary forage plants show grazing on key areas.
Moderate	41-50	Most of accessible range show use; Key areas show patchy appearance with one half to two thirds of primary forage plants (key species) showing use; Grazing is noticeable 1-1½ miles from water
Heavy	51-60	Nearly all primary forage plants show grazing on key areas: Palatable shrubs show hedging: Key areas show a lack of seed stalks: Grazing is noticeable in areas over 1½ miles from water
Severe	61+	Key areas show a clipped or mowed appearance (no stubble ht.): Shrubs are severely hedged; There is evidence of livestock trailing to forage; Areas over 1½ miles from water lack stubble height.

V. ADMINISTRATION

- 1. The permittee will record actual use as it occurs; including livestock numbers and dates your permitted livestock are in a pasture. This information will be reported at the next annual validation meeting.
- 2. Any change or deviation from this Annual Operating Instructions is to be coordinated and confirmed in <u>advance</u> with the District in an AOI amendment. Additionally, as per terms and conditions of the grazing permit, the permittee shall provide 5 days' notice of moving livestock on or off the allotment. Credit or refunds generated are based upon this documentation. If emergency conditions require making a change immediately, the permittee will notify the District as soon as practical.
- 3. Livestock remaining in pastures beyond the specified rotation date, that are allowed to drift between pastures, or grazing in rested pastures may be considered a violation of your Term Grazing Permit.
- 4. Livestock should be moved when forage utilization objectives have been met or within 1 week of planned rotation dates, unless changes have been confirmed with District Range personnel.
- 5. The District may spot check range improvements before the entry date to insure improvements are in a satisfactory condition. Livestock will not be allowed to enter pastures if assigned improvements are not maintained to proper standards. Livestock are not allowed to enter pastures if fences will not keep livestock where they are placed.

VI. SALT AND MINERAL BLOCK

Typically, salt or mineral blocks are not to be placed within a quarter mile of water or drainage bottoms. With District Ranger approval, salt may be placed closer than a quarter of a mile to water for specific purposes. Salt will be used to attract cattle to areas of a pasture typically not utilized and or for soil/range condition treatment purposes. Blocks may be removed by the District if found near water, over-utilized areas, meadow bottoms or roads. Feeding and/or supplements such as molasses are not authorized, unless on a case by case for specific purposes and approved by the District Ranger.

VII. MONITORING

Monitoring and evaluation is an essential aspect of good rangeland management. Monitoring and evaluation can be described as the gathering of information so the manager knows what is happening to rangeland resources and why. The intent of monitoring and evaluation is to test the success of the management strategy and if needed, make adjustments. The following types of monitoring can be collected and will be used by the Forest Service for management decisions.

- 1. Forage Production
- 2. Forage Utilization/ Stubble Height measurements.
- 3. Photo Points
- 4. Condition of Improvements
- 5. Actual Use
- 6. Grazing Response Index
- 7. Precipitation.

VIII. RANGE IMPROVEMENT CONSTRUCTION / MAINTENANCE

The permittee will maintain all range improvements that are assigned for maintenance on pages 11-14 of the Term Grazing Permit. Reconstruction or new improvements requires written authorization by the District Ranger through a Permit Modification. When improvements are completed the permittee will inform District Range personnel to schedule an inspection. Before using machinery to clean any pond within defined wildlife habitat, the permittee is required to give the District Office at least 45 days advance notice so that the tank can be inspected for threatened or endangered species. All work involving the use of heavy equipment will be accomplished only after prior approval of the District Ranger.

Current Year Improvement Scheduled		YEAR	2019	
Improvement Type / ID #	Completion Date	Description/Co	omments	Status Done /Date

IX. PROTECTION

The permittee, his agents and employees, when acting within the scope of their employment, and his contractors and subcontractors will protect the land and property of the United States, waived private land and other land under jurisdiction of the Forest Service covered by and used in conjunction with this permit. Protection will include taking all reasonable precautions to prevent, make diligent efforts to suppress and report promptly all fires on or endangering such land and property. During periods of high fire danger, branding fires will be allowed by permit only.

X. ALLOTMENT INSPECTIONS

Forest personnel may conduct periodic brief inspections of pastures within the allotment at any time to verify actual use, improvement conditions, or other non-range related activity. The permittee will be notified and invited to participate on extended (3-5 days) inspections.

Planned inspections for Grazing Year 2019:

Pasture	When	Location

Notes:

XI. PERMIT CONDITIONS

This Annual Operating Instructions is hereby made a part of the Term Grazing Permit as provided for in Part 2, Section 8(a). It complies with the standards and guidelines found in the Forest Plan.

Failure to comply with any of the terms and conditions specified in Parts 1, 2, and 3 of your Term Grazing Permit may result in suspension or cancellation, in whole or in part, after written notice. This is found in Part 1, Section 3, of your permit.

PERMITTEE

DATE

DISTRICT RANGEA

12/19/2018 DATE

Appendix: 92.14b – Describing Grazing Intensity (FSH 2209.13 – GRAZING PERMIT ADMINISTRATION HANDBOOK CHAPTER 90 – RANGELAND MANAGEMENT DECISIONMAKING.

Grazing intensity may be described in terms herbage removed during the grazing and/or growing period, or as a utilization level at the end of the growing period. It is important to clearly define how intensity is being viewed and described. Removal of leaf material, when the plant is actively growing can affect root growth which in turn affects future leaf growth. Sufficient leaf area is essential to support plant functions through photosynthesis. Heavy to severe intensity or utilization can affect current plant development and growth, as well as growth during subsequent growing seasons.

Grazing Intensity is discussed by Holechek and others (Holechek, Jerry L., Rex D. Pieper, and Carlton H. Herbel. 2004. Range Management, Principles & Practices. Prentice Hall, page 248):

Grazing Intensity as depicted as a utilization level at the end of the growing season as discussed by Holechek and Galt (Holechek, Jerry L. and Dee Galt. 2000. Grazing Intensity Guidelines. *Rangelands* 22(3): 11-14):

Light to non-use 0-30 percent
Conservative 31-40 percent
Moderate 41-50 percent
Heavy 51-60 percent
Severe 61+ percent

Qualitative Grazine Intensity Category	Use of Forage by Weight	Qualitative Indicators of Grazing Pitensity
Light to train use	(1 − 30) (1 − 30)	Only choice plants and areas show use. The east no use of poor forage plants
Cressivanse	V(-11)	Choice forage plants have about dant seed stalks. Areas more than a more from water show little use. About one third to ore half printing torage plants show grazing on key areas.
Moderate	41 5°	Most of accessible range shows use. Key areas show patchs ap- pearance with one half to two triads of primary forage plants showing use. Grazing is nonceable in zone 1/18 miles from water
Heavy	\$1 tH	Nearly all primary forago plants show grazing on key areas Palatable shrabs show hadging Key areas show a fack of sees stable: Grazing is noticeable in areas over 1.5 miles from wareing
Sever	nl+	Key areas show a chipped on mowed appearance (no suibble heights. Shrubs are severely hedged. There is evidence of live stock trailing to forace. Yeas over 1.5 miles from water fack stubble height.

Qualitative Grazing Intensity Category	Use of herage by Weight	}-	ubble kright luide	Forage Residuc Guice [†]
	• •	Blue Grama	Western Wheatgrass	
	- (%)	1:	nches)	(lbs/acre)
Light to non-use	(1-3()	2.5+	7.0 -	435+
Conservative	31.40	20.25	4.0-5.0	350-435
Moderate	41-50	1.5-2.0	3.0-1.0	265-350
Heavy	51-60	1.0-1.5	2.0-3.0	180-265
Severe	> 60	< 1.0	< 2.0	< 180

We have found residue guidelines developed by Benient (1969) for blue grama range lands in Colorado apply well to New Mexico blue grama tangelands.

Qualitative Use of Grazing Intensity Forage Category by Weight				Stul Her Gu	ght		
		Black Grama	Dropseed	Threeawn	Tobosa	Sacaton	Sideoats Grama
	(3)			finche	<1		
Light to non-use	0.30	5+	9+	5.	91	16+	9+
Conservative	31-40	4-5	8-9	4.5	7.9	14 46	8.9
Moderate	41.50	3.4	6.8	3.4	5-7	12-11	6-8
Heavy	5 -60	23	4tı	23	3-5	10/12	4.6
Severe	> 60	< 2	< 4	6.2	< 3	< 10	€ 4

Qualitative Grazing Intensity	Lise of Forage Isy Weight		Snabble Height Guide				
Category	by weight	Artzona	Western	Intermediate	Mutton grass	Moontain Mohly	
		Fescue	Wheatgrass	Wheetgrass	& Kenticky Blacgrass	y	
Light to non-use Conservative Moderate Heavy Severe	0-30 31 40 41 50 51-60 > 60	S- 6-7 5-6 4-5 <4	7- 4-5 3-4 2-3 < 2	(inches) 30+ 8-10 6-5 4-6 	5- 4-5 3-4 2-3 < 2	5+ 4-5 3-4 2-3 7-2	